METHODS, SYSTEMS AND COMPUTER PROGRAM PRODUCTS FOR PAPERLESS THIRD-PARTY BILLING OF BUSINESS DIRECTORY ADVERTISEMENTS

Field of the Invention

This invention relates to data processing systems, methods and/or computer program products, and more particularly to automated billing methods, systems and/or computer program products.

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Background of the Invention

Business directories such as Yellow Pages business directories and/or other telephone directories are widely distributed and used to identify products and services. Many business directories are distributed for free, at great potential expense, such that

10 advertising revenue from these directories may be used to sustain their distribution. As used herein, a "business directory" is a publication including listings for a plurality of businesses or commercial entities. Each listing may include, for example, the name, address and telephone number of the business. The listings may be organized alphabetically by business name, categorized or classified according to relevant

15 category or categories of products and/or services offered by the respective businesses and/or otherwise organized.

As is well known to those having skill in the art, the business directory advertising industry uses third party advertisement sellers, referred to as Customer Marketing Representatives (CMRs). A CMR sells business directory advertisements

20 to customers for the business directory publisher. Once an advertisement is sold, the business directory publisher bills the CMR, and the CMR in turn bills its customers.

In order to provide this billing, the business directory publisher "tears" a business directory advertisement, to generate what is referred to in the industry as a "tear page", and sends the tear page to the CMR along with an invoice. The CMR

25 may add a commission and generate its own invoice, which is sent to the CMR's customers.

Summary of the Invention

Some embodiments of the present invention paperlessly distribute to third party Customer Marketing Representatives (CMRs) for a business directory publisher, tear pages and business directory publisher invoices for business directory

5 advertisements that were sold by the CMRs to CMR customers. Other embodiments of the invention paperlessly distribute to the CMR customers, the tear pages and CMR customer invoices for business directory advertisements that were sold by the CMRs to the CMR customers. Accordingly, methods, systems and/or computer program products that employ paperless tear pages and billing can reduce the potentially large

10 printing, postage and/or manual labor costs associated with conventional tear page and invoice distribution.

In some embodiments of the present invention, an electronic image of a business directory advertisement that was sold by a CMR for the business directory publisher is generated. Also generated is an electronic invoice for the business

15 directory advertisement that was sold by the CMR for the business directory publisher. The electronic image and the electronic invoice are electronically linked. Electronic access to the electronic image and electronic invoice that are electronically linked is granted to the CMR.

In some embodiments, electronic access is granted to the CMR by sending an

20 email to the CMR including a hyperlink to the electronically linked electronic image and electronic invoice. In other embodiments, electronic access is granted to the CMR by sending an email to the CMR including a user identifier (userid) and/or password that may be used to electronically access the electronically linked electronic image and electronic invoice. Moreover, in some embodiments, the electronic image

25 and the electronic invoice are electronically linked by generating a hyperlink to the electronic image in the electronic invoice.

In other embodiments of the present invention, the generating of an electronic image, the generating of an electronic invoice and the electronically linking of the electronic image and the electronic invoice are repeatedly performed for a plurality of

30 business directory advertisements that were sold by the CMR for the business directory publisher to create an invoice summary statement. Electronic access is then granted to the CMR to the invoice summary statement.

In some embodiments, the electronic image is a read-only portable document format (PDF) file that contains the image of the business directory advertisement. In

other embodiments, the electronic invoice is an electronic spreadsheet that contains the electronic invoice. In other embodiments, the electronic invoice is a PDF file and/or a word processing document containing the electronic invoice.

Some embodiments of the invention also include electronically sending a

5   reminder message to the CMR if the CMR has not electronically accessed the electronically linked electronic image and electronic invoice within a predetermined time after the granting of electronic access. Moreover, in other embodiments, an electronic CMR credit/debit form is accepted by the business directory publisher. The CMR credit/debit form indicates that an error was made in the electronic invoice.

10   Also, in other embodiments, an electronic CMR adjustment form is accepted by the business directory publisher. The electronic CMR adjustment form indicates that an error was made in the business directory advertisement.

In other embodiments of the present invention, an electronically linked electronic image of a business directory advertisement that was sold by the CMR to a

15   CMR customer and a corresponding CMR electronic invoice for the business directory advertisement that was sold by the CMR to the CMR customer are configured to be electronically accessed by the CMR customer, in response to granting access to the electronically linked electronic image and electronic invoice by the business directory publisher. The CMR generates a customer electronic invoice

20   for the business directory advertisement that was sold by the CMR to the CMR customer, from the CMR electronic invoice. The electronic image and the customer electronic invoice are electrically linked. Electronic access is granted to the CMR customer to the electronically linked electronic image and customer electronic invoice. Access may be granted by sending an email to the CMR customer including

25   a hyperlink and/or a userid and/or password, as was described above. The CMR may also send an electronic credit/debit form and/or an electronic CMR adjustment form to the business directory publisher, as was described above.

It will be understood that embodiments of the invention have been described above primarily with regard to business directory advertisement billing methods.

30   However, analogous systems and/or computer program products also may be provided. Moreover, although embodiments of the invention were described above in connection with business directory advertisement billing, other embodiments of the present invention can provide general advertisement billing methods, systems and/or computer program products for a publisher, such as a periodical or directory

publisher, with respect to third party Marketing Representatives (MR) for the publisher. Although embodiments of the present invention may be used for advertising performed by any publisher, embodiments of the invention may have particular utility with respect to business directory advertisements using CMRs, due to

5   the potentially large volume of these advertisements and the potentially large dependence on advertising revenue by the business directory publisher.

Brief Description of the Drawings

Figure 1 is a block diagram of systems, methods and/or computer program

10   products according to some embodiments of the present invention.

Figures 2-7 are flowcharts of operations that may be performed according to various embodiments of the present invention.

Figure 8 is a functional block diagram of systems, methods and/or computer program products according to other embodiments of the present invention.

15   Figures 9-14 are examples of user interfaces that may be used in some embodiments of the present invention.

Detailed Description

The present invention now will be described more fully hereinafter with

20   reference to the accompanying figures, in which embodiments of the invention are shown. This invention may, however, be embodied in many alternate forms and should not be construed as limited to the embodiments set forth herein.

Accordingly, while the invention is susceptible to various modifications and alternative forms, specific embodiments thereof are shown by way of example in the

25   drawings and will herein be described in detail. It should be understood, however, that there is no intent to limit the invention to the particular forms disclosed, but on the contrary, the invention is to cover all modifications, equivalents, and alternatives falling within the spirit and scope of the invention as defined by the claims. Like numbers refer to like elements throughout the description of the figures.

30   The present invention is described below with reference to block diagrams and/or flowchart illustrations of methods, apparatus (systems) and/or computer program products according to embodiments of the invention. It is understood that each block of the block diagrams and/or flowchart illustrations, and combinations of blocks in the block diagrams and/or flowchart illustrations, can be implemented by

computer program instructions. These computer program instructions may be provided to a processor of a general purpose computer, special purpose computer, and/or other programmable data processing apparatus to produce a machine, such that the instructions, which execute via the processor of the computer and/or other

5   programmable data processing apparatus, create means for implementing the functions/acts specified in the block diagrams and/or flowchart block or blocks.

These computer program instructions may also be stored in a computer-readable memory that can direct a computer or other programmable data processing apparatus to function in a particular manner, such that the instructions stored in the

10   computer-readable memory produce an article of manufacture including instructions which implement the function/act specified in the block diagrams and/or flowchart block or blocks.

The computer program instructions may also be loaded onto a computer or other programmable data processing apparatus to cause a series of operational steps to

15   be performed on the computer or other programmable apparatus to produce a computer-implemented process such that the instructions which execute on the computer or other programmable apparatus provide steps for implementing the functions/acts specified in the block diagrams and/or flowchart block or blocks.

As will be appreciated by one of skill in the art, the present invention may be

20   embodied as a method, data processing system and/or computer program product. Thus, the present invention may take the form of an entirely hardware embodiment, an entirely software embodiment or an embodiment combining software and hardware aspects, which may be collectively referred to herein as a "circuit" or "module".

It should also be noted that in some alternate implementations, the

25   functions/acts noted in the blocks may occur out of the order noted in the flowcharts. For example, two blocks shown in succession may in fact be executed substantially concurrently or the blocks may sometimes be executed in the reverse order, depending upon the functionality/acts involved.

Figure 1 is a block diagram of systems, methods and/or computer program

30   products for business directory advertisement billing according to some embodiments of the present invention. As shown in Figure 1, these systems, methods and/or computer program products **100** include business directory publisher billing systems, methods and/or computer program products **110**, Customer Marketing Representative

(CMR) billing systems, methods and/or computer program products **120**, and customer billing systems, methods and/or computer program products **130**.

It will be understood that the business directory publisher billing system, methods and/or computer program products **110**, the CMR billing systems, methods

5   and/or computer program products **120**, and the customer billing systems, methods and/or computer program products **130** may each be embodied as one or more enterprise, application, personal and/or pervasive computer systems that may be interconnected via one or more networks, such as a local and/or wide area network including an intranet and/or the Internet. Moreover, the business directory publisher

10 billing systems, methods and/or computer program products **110**, the CMR billing systems, methods and/or computer program products **120**, and the customer billing systems, methods and/or computer program products **130** may be interconnected by a network **140**, which may include one or more local and/or wide area networks, including an intranet and/or the Internet. It also will be understood that, although a

15 single business directory publisher billing system, method and/or computer program product **110**, CMR billing system, method and/or computer program product **120**, and/or customer billing system, method and/or computer program product **130** is shown in Figure 1, multiple systems, methods and/or computer program products of each or selected ones **110**, **120** and **130** may be present in other embodiments of the

20 present invention.

Figure 2 is a flowchart of operations that may be performed for business directory advertisement billing according to various embodiments of the present invention. As shown at Block **210**, tear pages and business directory publisher invoices for business directory advertisements that were sold by CMRs to CMR

25 customers are paperlessly distributed to the CMRs. Operations of Block **210** may be performed, for example, by business directory publisher billing systems, methods and/or computer program products **110** of Figure 1. Moreover, as shown at Block **220**, other embodiments of the invention also include paperlessly distributing to the CMR customers, the tear pages and CMR customer invoices for business directory

30 advertisements that were sold by the CMRs to the CMR customers. These operations may be performed by CMR billing systems, methods and/or computer program products **120** of Figure 1.

Figure 3 is a flowchart of operations that may be performed by or for a business directory publisher, for example using a business directory publisher system,

method and/or computer program product **110** of Figure 1 and/or a paperless

distribution Block **210** of Figure 2. In particular, referring to Figure 3, at Block **310**,

an electronic image (also referred to as an "electronic tear page") of a business

directory advertisement that was sold by a third party CMR for the business directory

5   publisher is generated. In some embodiments of the present invention, the electronic

image is a read-only portable document format (PDF) file of the image. At Block

320, an electronic invoice for the business directory advertisement that was sold by

the CMR for the business directory publisher is generated. The electronic invoice

may be provided by generating an electronic spreadsheet, such as a Microsoft Excel

10   spreadsheet that contains the electronic invoice (and/or data used to create the

electronic invoice). In other embodiments, a PDF file and/or a word processing file,

such as a Microsoft Word document file, can contain the electronic invoice.

Still referring to Figure 3, at Block **330**, the electronic image and the

electronic invoice are electronically linked. For example, electronic linking may be

15   provided by generating a hyperlink to the electronic image in the electronic invoice.

Other conventional electronic linking techniques may be used. Then, at Block **340**,

electronic access is granted to the CMR to allow the CMR to access the electronically

linked electronic image and electronic invoice. In some embodiments, electronic

access is granted by sending an email to the CMR including a hyperlink to the

20   electronically linked electronic image and electronic invoice. In other embodiments,

electronic access is granted by sending an email to the CMR including a userid and/or

password that may be used to electronically access the electronically linked electronic

image and electronic invoice. The email can be sent to a general CMR mailbox, a

single CMR email address and/or a list of CMR email addresses. Other conventional

25   electronic access techniques may be employed, such as posting to a secure website.

Figure 4 is a flowchart of operations that may be performed by or for a

business directory publisher to generate multiple invoices and an invoice summary

statement, according to some embodiments of the invention. As was the case with

Figure 3, these operations may be performed by the business directory publisher

30   billing systems, methods and/or computer program products **110** of Figure 1 and may

constitute embodiments of Block **210** of Figure 2.

Referring now to Figure 4, the operations of Blocks **310**, **320**, and **330** are

performed. Then, at Block **410**, a test is made as to whether additional business

directory advertisements are to be electronically billed to a particular CMR. If yes,

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the operations of Blocks **310, 320** and **330** are repeatedly performed for a plurality of business directory advertisements that were sold by the CMR for the business directory publisher. Once a plurality of, and in some embodiments, all, additional advertisements are processed at Block **410**, an invoice summary statement is created

5   at Block **420**. Then, at Block **430**, electronic access to the invoice summary statement is granted to the CMR. Electronic access may be granted using one or more of the techniques that were described in connection with Block **340** of Figure 3.

Figure 5 is a flowchart of other operations that may be performed by or for the business directory publisher, for example using business directory publisher billing

10   systems, methods and/or computer program products **110** of Figure 1 and/or Block **210** of Figure 2. These operations may be performed in conjunction with the operations of Figures 3 and/or 4, or separate therefrom.

Referring to Figure 5, at Block **510**, a reminder message is electronically sent to the CMR if the CMR has not electronically accessed the electronically linked

15   electronic image and electronic invoice within a predetermined time after the granting of electronic access. Accordingly, the CMR can be prodded to process its bill in a timely manner. In other embodiments of the present invention, as shown at Block **520**, an electronic CMR credit/debit form is accepted by or for the business directory publisher. The electronic CMR credit/debit form indicates that an error was made in

20   the electronic invoice for the business directory advertisement that was sold by the CMR for the business directory publisher. Finally, at Block **530**, an electronic CMR adjustment form is accepted by or for the business directory publisher. The electronic CMR adjustment form indicates that an error was made in the business directory advertisement that was sold by the CMR for the business directory publisher and

25   allows the publisher to take timely corrective measures. It will be understood that subcombinations of Blocks **510, 520** and **530** also may be performed in combination with, or separate from, the operations of Figures 2, 3 and/or 4.

Figure 6 is a flowchart of operations that may be performed by a CMR billing system, method and/or computer program product, such as the CMR billing systems,

30   methods and/or computer program products **120** of Figure 1 and/or Block **220** of Figure 2. As shown in Figure 6, at Block **610**, an electronically linked electronic image of a business directory advertisement that was sold by the CMR to a CMR customer and a CMR electronic invoice for the business directory advertisement are electronically accessed, in response to granting access to the electronically linked

electronic image and electronic invoice by the business directory publisher. Electronic access may be provided as was already described in connection with Blocks **340** and/or **430**, and will not be repeated for the sake of brevity.

At Block **620**, the CMR generates a customer electronic invoice for the
5   business directory advertisement that was sold by the CMR to the CMR customer, from the CMR electronic invoice for the business directory advertisement that was sold by the CMR to the CMR customer. The customer electronic invoice may use data from the spreadsheet of the CMR electronic invoice and may add appropriate commissions or other fees that are charged by the CMR to the CMR customer. For
10   example, the CMR electronic invoice may employ data from the CMR invoice or the CMR invoice itself with additional and/or altered data fields (i.e., adding commission, discount, etc.). At Block **630**, the electronic image and the customer electronic invoice are electronically linked, for example using the techniques that were described in Block **330** above. Finally, electronic access is granted to the CMR customer to the
15   electronically linked electronic image and customer electronic invoice at Block **640**. Electronic access may be granted using any of the techniques that were described in connection with Blocks **340** and/or **430**. Accordingly, a CMR may paperlessly bill its customer using the electronic tear page that was provided by the business directory publisher and an invoice that may be generated from the invoice that was provided by
20   the business directory publisher. Paperless distribution of tear pages and CMR invoices to CMR customers thereby may be provided.

Figure 7 is a flowchart of other operations that may be performed by a CMR billing system, method and/or computer program product, such as CMR billing systems, methods or computer program products **120** of Figure 1 or Block **220** of
25   Figure 2. In particular, at Block **710**, an electronic CMR debit/credit form is sent to the business directory publisher that indicates that an error was made in the CMR electronic invoice for the business directory advertisement that was sold by the CMR to the CMR customer for the business directory publisher. At Block **720**, an electronic CMR adjustment form may be sent to the business directory publisher that
30   indicates that an error was made in the business directory advertisement that was sold by the CMR to the CMR customer for the business directory publisher. Operations at Blocks **710** and **720** may be analogous to operations of Blocks **520** and **530**, and will not be described again for the sake of brevity. Moreover, subcombinations of Blocks

710 and **720** also may be performed in combination with, or separate from, the operations of Figures 2 and/or 6.

Figure 8 is a functional block diagram of other embodiments of the present invention. In particular, first and second application servers **810** and **820**,

5   respectively, may form part of a business directory publisher billing system, method and/or computer program product **110** of Figure 1. The second application server **820** can be a billing information system that is used to generate electronic invoices which were then printed and mailed to the CMRs. However, in embodiments of the present invention, the billing information provided by the second application server **820** can

10   be provided to the first application server **810** in electronic form to prepare an electronic invoice. Moreover, an advertisement may be created by an artist by or for the business directory publisher. The advertisement may be created electronically and/or created manually and electronically stored. Rather than printing out the tear page **840** and mailing the tear page **840** to the customer, the electronically generated

15   tear page **840** may be maintained in its electronic form.

Continuing with the description of Figure 8, the first application server **810** prepares the electronic invoices from the financial information provided by the second server **820**, and then sends an email to the CMR billing system, method and/or computer program product **120**, represented in Figure 8 as a web client **830**, as shown

20   by arrow **870**. The email can notify the CMR of the location of the electronic invoice, and may provide a link to the electronic tear page **840**. As shown in Figure 8 by arrow **850**, the web client **830** can access or view the electronic invoice via the first application server **810** and, as shown by arrow **860**, may also view the electronic tear page **840**. In some embodiments, once an advertisement is created by an artist, the

25   invoice is prepared and the CMR is sent a link via email with a user name and password. The CMR can then click on the link or visit the business directory operator website and, using the userid and password, log in to view their invoice(s) and tear page(s).

30   Examples

Figures 9-14 provide examples of user interfaces that may be used in some embodiments of the present invention. These examples shall be regarded as merely illustrative and shall not be construed as limiting the invention.

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5   whatsoever.

Figure 9 provides an example of a user interface that can provide an invoice summary statement corresponding, for example, to Block **420** of Figure 4. As shown in Figure 9, a client may view any of the invoices listed in the invoice summary by clicking on the "View" hyperlink and/or by using a browser bookmark. It also will be

10   understood that, prior to obtaining the user interface of Figure 9, the user may be authenticated. The "Available Print Options" scrollbox allows the CMR to print the entire package, the invoice summary statement, or the invoice summary statement and invoices. The "Print Status" hyperlink allows the CMR to see if this invoice summary statement has been downloaded, printed or both.

15   Figure 10 provides an example of a CMR electronic invoice, with fictitious data included, as was described, for example, at Block **320** of Figures 3 and 4. As shown in Figure 10, each invoice item includes a "View" hyperlink, which allows the CMR to electronically access the electronic image of a business directory advertisement that was sold by the CMR for the business directory publisher. The

20   "Available Print Options" scrollbox may function as was described in connection with

Figure 11 illustrates an example of an electronic image of a business directory advertisement (electronic tear page), such as was described in connection with Block **310** of Figures 3 and 4. In some embodiments, the electronic tear page includes an entire page of the business directory that includes the business directory

25   advertisement that is being invoiced. In other embodiments, only a portion of the business directory page that includes the business directory advertisement may be included in the electronic tear page. In still other embodiments, only the business directory advertisement itself is included in the electronic tear page.

Figure 12 is an example of a user interface that may be provided to generate a

30   CMR credit/debit memo, also referred to as a "1080 Form", such as was described in connection with Block **520** of Figure 5. Figure 13 is an example of a user interface that may be used to generate an electronic CMR adjustment form, also referred to as a "1090 Form", that was described in connection with Block **530** of Figure 5. The 1080

and 1090 Forms are commonly used in conventional business directory advertising and need not be described in detail herein.

Figure 14 illustrates an example of a user interface that may be used by or for the business directory publisher to determine whether a CMR invoice has been paid
5   within a predetermined time, and thereby electronically send a reminder, corresponding to Block **510** of Figure 5. The reminder may be automated and/or carried out responsive to a directory publisher representative query.

In view of the above, embodiments of the present invention can paperlessly distribute tear pages and business directory publisher invoices to CMRs. Moreover,
10   embodiments of the present invention can paperlessly distribute tear pages and CMR invoices to CMR customers. The potential costs associated with paper tear pages, paper invoices, printing, mailing and/or other manual labor can be reduced or minimized.

In the drawings and specification, there have been disclosed embodiments of
15   the invention and, although specific terms are employed, they are used in a generic and descriptive sense only and not for purposes of limitation, the scope of the invention being set forth in the following claims.